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EXAMINER

MILIA, MARK R

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NOTIFICATION DATE

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ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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## DETAILED ACTION

### *Response to Amendment*

1. Applicant's amendment was received on 5/9/08 and has been entered and made of record. Currently, claims 1-14, 16-35, and 37-38 are pending.

### *Drawings*

2. Applicant's amendment to the specification to insert reference numeral **623** has overcome the objection set forth in the previous Office Action. Therefore the objection has been withdrawn.

### *Specification*

3. Applicant's amendment to the abstract and specification has overcome the objection set forth in the previous Office Action. Therefore the objection has been withdrawn.

***Claim Rejections - 35 USC § 101***

4. Applicant's amendment to claims 8 and 27 has overcome the rejection set forth in the previous Office Action. Therefore the rejection has been withdrawn.

***Response to Arguments***

5. Applicant's arguments, see pages 18-21, filed 5/9/08, with respect to the rejection(s) of claim(s) 1, 8, 16, 18, 27, and 36 under 35 U.S.C. 102(b) and 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the current amendment to the claims.

***Claim Rejections - 35 USC § 103***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1-3, 5-10, 12-14, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lester (US 2002/0140958) in view of Hohensee (US 6,407,821).

Regarding claims 1, 8, and 16, Lester discloses an image forming device, program, and method for receiving a document file and forming images of said document file, wherein said document file contains a plurality of pages and a plurality of

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objects for displaying a part or all of the contents of each page of the document and being capable of lining up in the file regardless of the order of said contents displayed in said document, comprising: a receiving unit for successively receiving constituent data of said document file (see Figs. 1-3 and paragraphs 8 and 41), a storing unit for successively storing said objects contained in said constituent data received by said receiving unit (see paragraphs 42-44), a judging unit for judging whether all objects necessary for displaying a specific page out of the plurality of objects included in the document file are stored in said storing unit (see Fig. 5 and paragraph 44), and an image forming unit for forming images of said specific page when it is judged by said judging unit that all objects necessary for displaying said specific page are stored in said storing unit (see Fig. 5 and paragraph 44).

Lester does not disclose expressly an image forming unit for forming images of said specific page when it is judged by said judging unit that all objects necessary for displaying said specific page are stored in said storing unit regardless of whether the plurality of objects included in the document file have been stored in said storing unit or not.

Hohensee discloses a judging unit for judging whether all objects necessary for displaying a specific page out of the plurality of objects included in the document file are stored in said storing unit (see Figs. 2 and 6, column 2 lines 5-25 and column 9 lines 58-63), and an image forming unit for forming images of said specific page when it is judged by said judging unit that all objects necessary for displaying said specific page are stored in said storing unit regardless of whether the plurality of objects included in

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the document file have been stored in said storing unit or not (see Figs. 6 and 7, column 9 line 26-column 10 line 30, and column 11 lines 3-52, reference shows that duplicate resources are not stored and instead when a particular object is to be used on a plurality of pages the object is reused, therefore not all the objects in a document file are stored and a specific pages can be output when necessary objects have been stored).

Lester & Hohensee are combinable because they are from the same field of endeavor, printing of PDF files.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the deleting of redundant objects that have previously been stored and the forming of images after all necessary objects are stored regardless of whether the plurality of objects are stored, as described by Hohensee, with the system of Lester.

The suggestion/motivation for doing so would have been to decrease the memory needed to store a PDF file for printing and to avoid downloading redundant resources (see column3 lines 10-15 of Hohensee).

Therefore, it would have been obvious to combine Hohensee with Lester to obtain the invention as specified in claims 1, 8, and 16.

Regarding claims 2 and 9, Hohensee further discloses wherein said specific page is a head page among pages whose images have not been formed (see Fig. 6 and column 2 lines 5-25).

Regarding claims 3 and 10, Hohensee further discloses a deleting unit for deleting a specific object which has already been stored in said storing unit (see Figs. 2 and 6 and column 9 lines 58-63).

Regarding claims 5 and 12, Hohensee further discloses wherein said specific object is an object which is not necessary for displaying other pages whose images have not been formed among objects used for displaying pages whose images have been formed (see Figs. 2 and 6 and column 9 lines 58-63).

Regarding claims 6 and 13, Hohensee further discloses a transmitting unit for transmitting a transmission request concerning the deleted object when an object for displaying said specific page is deleted from said storing unit by said deleting unit (see column 5 lines 36-51).

Regarding claims 7, 14, and 17, Lester further discloses wherein said document file is a PDF file (see paragraphs 8 and 39-48).

8. Claims 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lester and Hohensee as applied to claims 3 and 10 above, and further in view of Japanese Patent Document No. 09-174955 to Abe as cited on the IDS dated 6/20/07. Reference will be made to a computer translation which was furnished with the previous Office Action.

Lester and Hohensee do not disclose expressly a second judging unit for judging whether the amount of usage of said storing unit has exceeded a prescribed limit of usage, wherein said deleting unit is to delete said specific object from said storing unit

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when it is judged by said second judging unit that the amount of usage of said storing unit has exceeded the prescribed limit of usage.

Abe discloses a second judging unit for judging whether the amount of usage of said storing unit has exceeded a prescribed limit of usage, wherein said deleting unit is to delete said specific object from said storing unit when it is judged by said second judging unit that the amount of usage of said storing unit has exceeded the prescribed limit of usage (see paragraphs 13 and 14).

Lester, Hohensee, & Abe are combinable because they are from the same field of endeavor, printing of document data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the deletion of specific objects when a storage capacity threshold is reached, as described by Abe, with the system of Lester and Hohensee.

The suggestion/motivation for doing so would have been to allow systems with a relatively small memory capacity, which saves system costs, to be able to process and print PDF files.

Therefore, it would have been obvious to combine Abe with Lester and Hohensee to obtain the invention as specified in claims 4 and 11.

9. Claims 18, 27, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lester (US 2001/0140958) in view of Abe (JP 09-174955).

Regarding claims 18, 27, and 37, Lester discloses an image forming device, program, and method for receiving a document file and forming images of said



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document file, wherein said document file contains objects for displaying a part or ail of the contents of each page of the document and being capable of lining up in the file regardless of the order of said contents displayed in said document, comprising: a receiving unit for successively receiving constituent data of said document file (see Figs. 1-3 and paragraphs 8 and 41), a storing unit for successively storing said objects contained in said constituent data received by said receiving unit (see paragraphs 42-44), an image forming unit for forming images of said objects stored in said storing unit either singly or in combination of two or more of them regardless of the order displayed in said document (see Fig. 5 and paragraph 44).

Lester does not disclose expressly a judging unit for judging whether an amount of usage of said storing unit has exceeded a prescribed limit of usage, an image forming unit for forming images of said objects stored in said storing unit either singly or in combination of two or more of them regardless of the order displayed in said document when it is judged by said judging unit that the amount of usage of said storing unit has exceeded the prescribed limit of usage, and a deleting unit for deleting said object whose image has been formed by said image forming unit from said storing unit.

Abe discloses a judging unit for judging whether an amount of usage of said storing unit has exceeded a prescribed limit of usage (see paragraph 13), an image forming unit for forming images of said objects stored in said storing unit either singly or in combination of two or more of them regardless of the order displayed in said document when it is judged by said judging unit that the amount of usage of said storing unit has exceeded the prescribed limit of usage (see paragraphs 13-14), and a deleting

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unit for deleting said object whose image has been formed by said image forming unit from said storing unit (see paragraph 14).

Lester & Abe are combinable because they are from the same field of endeavor, printing of document data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the deletion of specific objects when a storage capacity threshold is reached, as described by Abe, with the system of Lester.

The suggestion/motivation for doing so would have been to allow systems with a relatively small memory capacity, which saves system costs, to be able to process and print PDF files.

Therefore, it would have been obvious to combine Abe with Lester to obtain the invention as specified in claims 18, 27, and 37.

Regarding claims 23 and 32, Abe further discloses a second judging unit for judging whether the amount of usage of said storing unit has exceeded a prescribed limit of usage, wherein said deleting unit is to delete said specific object from said storing unit when it is judged by said second judging unit that the amount of usage of said storing unit has exceeded the prescribed limit of usage (see paragraphs 13 and 14).

Regarding claims 25 and 34, Lester further discloses wherein said image forming unit forms images of said object in the order stored in said storing unit (see paragraphs 39-44).

Regarding claims 26, 35, and 38, Lester further discloses wherein said document file is a PDF file (see paragraphs 8 and 39-48).

10. Claims 24 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lester and Abe as applied to claims 18 and 27 above, and further in view of Hohensee (US 6,407,821).

Lester and Abe do not disclose expressly a deleting unit for deleting a specific object which has already been stored in said storing unit.

Hohensee discloses a deleting unit for deleting a specific object which has already been stored in said storing unit (see Figs. 2 and 6 and column 9 lines 58-63).

Lester, Abe, & Hohensee are combinable because they are from the same field of endeavor, printing of document data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the deleting of redundant objects that have previously been stored, as described by Hohensee, with the system of Lester and Abe.

The suggestion/motivation for doing so would have been to decrease the memory needed to store a PDF file for printing and to avoid downloading redundant resources (see column 3 lines 10-15 of Hohensee).

Therefore, it would have been obvious to combine Hohensee with Lester and Abe to obtain the invention as specified in claims 24 and 33.

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11. Claims 19 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lester and Abe as applied to claims 18 and 27 above, and further in view of Hohensee.

Lester and Abe do not disclose expressly an identification name assigning unit for assigning identification names to said objects stored in said storing unit, wherein said image forming unit forms images of said objects together with the identification names assigned to said objects by said identification name assigning unit.

Hohensee discloses an identification name assigning unit for assigning identification names to said objects stored in said storing unit, wherein said image forming unit forms images of said objects together with the identification names assigned to said objects by said identification name assigning unit (see Fig. 6, column 9 line 43-column 10 line 30, and column 11 lines 36-52).

Lester & Hohensee are combinable because they are from the same field of endeavor, printing of document data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the identification names of objects, as described by Hohensee, with the system of Lester and Abe.

The suggestion/motivation for doing so would have been to ensure proper preservation of data objects and to avoid downloading redundant resources (see column3 lines 10-15 of Hohensee).

Therefore, it would have been obvious to combine Hohensee with Lester and Abe to obtain the invention as specified in claims 19 and 28.

12. Claims 20-22 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lester, Abe, and Hohensee as applied to claims 19 and 27 above, and further in view of Brown (US 2004/0216048).

Regarding claims 20 and 29, Hohensee discloses an identification name information generating unit for generating identification name information which is information on the identification names of said objects contained in each page of said document (see Fig. 6, column 9 line 43-column 10 line 30, and column 11 lines 36-52).

Lester, Abe, and Hohensee do not disclose expressly wherein said image forming unit further forms images of the identification name information generated by said identification name information generating unit.

Brown discloses wherein said image forming unit further forms images of the identification name information generated by said identification name information generating unit (see paragraph 38).

Regarding claim 21 and 30, Lester, Abe, and Hohensee do not disclose expressly wherein said identification name information contains table of contents which displays each page number of said document and the identification names of said objects contained in the page related to said page number.

Brown discloses wherein said identification name information contains table of contents which displays each page number of said document and the identification names of said objects contained in the page related to said page number (see paragraph 38).

Regarding claims 22 and 31, Lester, Abe, and Hohensee do not disclose expressly wherein said identification name information contains page information which displays the identification names of said objects contained in a specific page of said document and the identification name of said specific page, and list of pages which displays each page number of said document and the identification name of a page related to said page number.

Brown discloses wherein said identification name information contains page information which displays the identification names of said objects contained in a specific page of said document and the identification name of said specific page, and list of pages which displays each page number of said document and the identification name of a page related to said page number (see paragraph 38).

Lester, Abe, Hohensee, & Brown are combinable because they are from the same field of endeavor, printing of document data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the printing of a table of contents, which inherently contains page numbers associated with document data (object names), as described by Brown, with the system of Lester, Abe, and Hohensee because table of contents are a well known and commonly used method of informing a user of the location of specific data to allow the user to easily locate desired information thereby saving the user time and effort.

Therefore, it would have been obvious to combine Brown with Lester, Abe, and Hohensee to obtain the invention as specified in claims 20-22 and 29-31.

***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (571)272-7408. The examiner can normally be reached M-F 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached at (571) 272-7437. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

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